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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,410	02/05/2004	Kyung-yol Yon	1349.1346	3843
21171 STAAS & HA	7590 07/19/2007		EXAM	INER
STAAS & HALSEY LLP SUITE 700			VAJDA, PETER L	
1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
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			MAIL DATE	DELIVERY MODE
			07/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/771,410	YON ET AL.			
		Examiner	Art Unit			
		Peter L. Vajda	1756			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) ズ	Responsive to communication(s) filed on 02 Ju	ulv 2007				
·	This action is FINAL . 2b)⊠ This action is non-final.					
· <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4)🛛	Claim(s) <u>1-11,14,15 and 17</u> is/are pending in th	ne application.				
	4a) Of the above claim(s) <u>12,13 and 16</u> is/are withdrawn from consideration.					
5)□	5) Claim(s) is/are allowed.					
6)⊠	6) Claim(s) <u>1-11,14,15 and 17</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)□	Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers						
9) The specification is objected to by the Examiner.						
10) 🔲 -	The drawing(s) filed on is/are: a)☐ acce	epted or b) objected to by the E	xaminer.			
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	nder 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
O	ce the attached detailed office action for a list of	or the certified copies not receive	u.			
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08)	te atent Application				
Paper						

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DETAILED ACTION

In response to the applicants' arguments filed on 07/02/2007, the examiner acknowledges the common ownership of the Moudry *et al.* (2005/0160938) reference as they are both assigned to Samsung. In view of this, the 35 U.S.C. 103(a) rejections over over Moudry *et al.* (US Patent Publication 2005/0160938) in view of Brechlin *et al.* (US Patent 4157974), Moudry *et al.* (US Patent Publication 2005/0160938) in view of Ohsawa *et al.* (US Patent 6679597), Brechlin *et al.* (US Patent 4157974) in view of Moudry *et al.* (US Patent Publication 2005/0160938), and Ohsawa *et al.* (US Patent 6679597) in view of Moudry *et al.* (US Patent Publication 2005/0160938) are withdrawn. The following rejection is hereby applied.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-11, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Morrison *et al.* (US PGP 2002/0086916).

Morrison *et al.* teach a liquid ink as well as a method of making said ink, comprising surface treated colorant pigment particles and an organosol (Abstract). The colorant pigment is taught to be surface-treated with a nitrogen-containing polymer or copolymer (p. 4 [0037]). Furthermore, the inventors teach the use of finely divided carbon as a colorant, which is well known in the art to be carbon black (p. 4 [0035]. In

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the specification of the pending application, the applicants define carbon black as powdery carbon, which is maintained by the examiner to be the same as finely divided carbon (p. 3 [0011] of the spec.). Morrison et al. also teach the use of a charge control agent (p. 5 [0042]). Additionally, the inventors teach a range for the ratio of resin to colorant from 1/1 to 20/1 (p. 4 [0036], which thereby encompasses the ratio range cited by the applicant in claims 2 and 3 of from 150/100 to 350/100 (resin to colorant, claims 2 and 3). Example 2 of Morrison discloses a coated colorant formed by adding to 20g of carbon black to 60g of a poly(vinylpyridine-co-butyl methacrylate) solution (p. 8-9 [0078]). Therefore, the coated colorant is 300 weight parts resin based on 100 weight parts of the colorant $(60(resin)/20 (colorant) = 3/1 \times 100 = 300/100)$. Furthermore, Example 5 discloses the use of styrene and methacrylate monomers to make the thermoplastic reisn and thus anticipates claim 5 (p. 10 [0089]). Morrison et al. further teach that suitable examples of polymerizable organic compounds for the organosol core include N,N-dibutylaminoethyl (meth)acrylate which qualifies as a (meth)acrylate monomer having aliphatic amino radicals (p. 4 [0032]). The organosol is milled together with the colorant pigment to form a stable black ink and therefore there is either a chemical or physical binding of the organosol core to the coated colorant (p. 9 [0079-81]). The N,N-dibutylaminoethyl (meth)acrylate compound will form an amino radical due to the stabilization provided by the two butyl groups.

The method taught by Morrison entails dissolving a polymer in a solvent, dispersing colorant pigment into said polymer solution to form a colorant pigment

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dispersion, removing the surface treated pigment particles, and dispersing the treated

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colorant pigment particles into an organosol (p. 2 [0016-18]).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Peter L. Vajda whose telephone number is 571-272-

7150. The examiner can normally be reached on 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

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PLV 07/16/2007

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Mark F. Huff

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